

REMARKS

In the Final Office Action, the Examiner rejected claims 1-3, 6, 7, 12, 36, 38, and 41-43, and indicated that claims 4, 5, 8-11, 13-26, 37, 39, and 40 have been withdrawn from consideration. By this paper, Applicants place the application in condition for allowance by amending claims 1, 12-17, 36, and 38 and adding new claims 44-52, of which 44-49 are taken from claims 18-23. These amendments and additions do not add any new matter. Further, Applicants have canceled claims 18-23, 37, 39, and 40, without prejudice to file these claims in a continuing application. Applicants also request rejoinder of withdrawn claims depending from allowable independent claim 1, i.e., claims 4, 5, 8-11, 13-17, and 24-26. Accordingly, claims 1-17, 24-26, 36, 38, and 41-49 remain pending in the present application and are believed to be in condition for allowance. In view of the above amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

Allowable Subject Matter and Interview Summary

In the Final Office Action mailed on July 2, 2008, the Examiner noted the presence of allowable subject matter, stating that

Claims 1-3, 6, 7, 12, 36, 38 and 41-43 are free of the prior art to the extent that they read upon the elected species. However, in accordance with Markush practice, the search was expanded to cover additional non-elected species within the scope of the pending claims. Grounds for rejection over non-elected species are maintained as in the Office Action mailed 12/21/2007.

Final Office Action mailed on July 2, 2008, pp. 4-5. Applicants thank the Examiner for identifying allowable material and have amended the claims to place the application in condition for allowance. As the Examiner has referred to the rejections made in the previous Office Action mailed on December 21, 2007, the discussion below refers to this Office Action.

Applicants' representative, Nathan Stacy, Reg. no 52,249, initiated a teleconference with the Examiner, Leah Schlientz on August 29, 2008, to clarify the allowable material. Although no agreement was reached during this teleconference, Applicants submit that the Examiner's remarks in the Final Office Action and the teleconference indicate that the claims would be allowable if amended to read on the elected species. Accordingly, Applicants have amended the claims to remove "a biomolecule," with the exception of claim 38. Claim 38 is believed to be allowable for at least the reasons discussed below. Applicants emphasize that the cancellation of material from the present claims is without prejudice to file this material in a continuing application. Accordingly, Applicants believe that all presently pending claims are in condition for allowance.

Rejections Under 35 U.S.C. § 103

In the present Final Office Action, the Examiner maintained the rejection of claims 1-3, 6, 7, 12, and 41-43 under 35 U.S.C. § 103(a) as being unpatentable over the Alves publication in view of Hawthorne, U.S. Patent No. 5,066,479 (hereinafter "Hawthorne"). The Examiner also maintained the rejection of claims 36 and 38 under 35 U.S.C. § 103(a) as being unpatentable over the Alves publication in view of Merkle et al., U.S. Patent No. 5,569,769 (hereinafter "Merkle"). Applicants respectfully traverse these rejections.

As a preliminary matter, Applicants respectfully note that claim 43 depends from claim 36 and not from claim 1. The Examiner does not specifically refer to this claim in the discussion in the Office Action mailed on December 21, 2007, but based on the Examiner's statements, Applicants assume that the Examiner intended to group this claim with independent claim 36, from which it depends. Accordingly, claim 43 is discussed with claim 36 below.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (B.P.A.I. 1979). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Alves and Hawthorne, taken alone or in hypothetical combination, fail to disclose all of the elements recited in independent claim 1.

In the Office Action mailed on December 21, 2007, the Examiner stated that

Alves discloses compounds meeting the formula as claimed in claim 1, but teaches a hydrogen at position R2, rather than a carboxylate or amine functional group. Alves teaches that the ligands may be derivatized to carry a biomolecule (i.e. via functionalization at the pyrazolyl ring).

* * *

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to derivatize the pyrazolyl ring of the ligands taught by Alves to carry a biomolecule because Alves teaches that said ligands are intended for the stabilization of the $[M(CO)_3]^+$ core and for linking to biomolecules, and one would have been motivated to do so because Alves specifically teaches that said ligands offer easy functionalization through the pyrazolyl ring (see Alves page 1474).

Office Action mailed December 21, 2007, pp. 4-5. The Examiner merely cited Hawthorne as teaching that “derivatization of a pyrazoyl ring via a carboxylate or amine functional group is well known in the art to be a method by which ^{99m}Tc chelating moieties may be conjugate to a biomolecule.” Office Action mailed December 21, 2007, pp. 4-5.

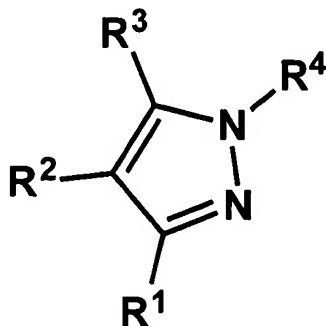
Applicants respectfully disagree with the Examiner that any hypothetical modification of Alves with the teachings in Hawthorne would be obvious in the present case. However, to place the claims in condition for allowance, Applicants have amended claims 1, and 12-17, and canceled claims 18-23 to remove references to "biomolecules."

Accordingly, Applicants respectfully assert that the rejection of independent claim 1 under 35 U.S.C. § 103(a) is moot, and request that the Examiner remove the rejection and allow the claim to issue. Applicants respectfully assert that claims 2-11, 24-26, 41, and 42 which ultimately depend from claim 1 are allowable for at least the same reasons. Although several of these claims stand withdrawn, Applicants are requesting rejoinder, as discussed below.

Alves and Merkle, taken alone or in hypothetical combination, fail to disclose all of the elements recited in independent claim 36.

For at least the same reasons as discussed above, claim 36 is allowable over Alves in view of Merkle. Independent claim 36 has been amended to remove the term "biomolecules," and thus Applicants believe the rejection of claim 36 to be moot for essentially the same reasons as discussed above.

More specifically, Merkle, either alone or in any sort of hypothetical combination with Alves, does not obviate the deficiencies of Alves. Merkle discloses a compound having the general structure:



in which the substituents R¹ through R⁴ “are each, independently of one another, hydrogen, halogen, nitro, carboxyl, sulfonyl or C-organic radical.” Merkle, column 3, lines 30-40 (emphasis added). Merkle discloses a number of C-organical radicals that may be used as R⁴; however, none of the disclosed species matches the presently claimed structures. *Id.*, column 3, lines 43-61.

Accordingly, Applicants believe that claim 36 is not obvious over Alves and Merkle. For at least the same reasons, Applicants assert that claim 43, which depends from claim 36, is also allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of these claims under 35 U.S.C. § 103(a) and allow the claims to issue.

Alves and Merkle, taken alone or in hypothetical combination, fail to disclose all of the elements recited in independent claim 38.

Independent claim 38 of the present application recites that “at least one of R₁ and R₃ is aryl.” In contrast, Alves only discloses a compound having methyl groups in the R₁ and R₃ positions. Although Merkle discloses a compound that may have an aryl in the R₁ or R₃ position as discussed with respect to claim 36, Merkle gives no indication that “at least one of R₁ and R₃ is aryl” as recited in claim 38. (Emphasis added). Indeed, as in Alves, all of the various compounds provided as examples in Merkle all have hydrogen or methyl groups in these positions. *See* Merkle, col. 4, l. 3, l. 36, and l. 55; col. 5, l. 13, l. 45, and l. 65; col. 6, l. 7 and l. 24.

Hypothetically, even if the genus disclosed in Alves in view of Merkle encompassed the species of the present application, it does not make it obvious. *See In re Baird*, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994) (“The fact that a claimed compound may be encompassed by a disclosed generic formula does not by itself render that compound obvious.”). Neither Alves nor Merkle presents any indication that substituting a phenyl for the methyl groups would provide beneficial properties, or, indeed, any reason for

making the substitution. *See* M.P.E.P. 2144.08(II)(A)(4) (stating that “Office personnel should determine whether it would have been obvious to one of ordinary skill in the relevant art to make the claimed invention as a whole, i.e., to select the claimed species or subgenus from the disclosed prior art genus.”). The Examiner has stated that “such substituents (i.e. methyl and phenyl) are shown in the art to be equivalent substituents used in derivatization of a pyrazole ring, e.g. for use in preparing pharmacologically active compounds, as shown by Merkle.” Office Action mailed December 21, 2007, pp. 6-7. However, Applicants respectfully note that Merkle contains no statements that the two types of groups are equivalent. Further, Applicants respectfully assert that one of ordinary skill in the art would not believe that a methyl and an aromatic group, such as a phenyl, would provide equivalent properties.

Thus, Alves and Merkle, alone or in any hypothetical combination, do not disclose all of the elements of claim 38, and do not support a *prima facie* case for obviousness. For at least the same reasons, Applicants assert that new claims 44-49, which depend from claim 38, are allowable. These claims are supported by at least original claims 18-23, which have been redrafted to depend from claim 38. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claim 38 under 35 U.S.C. 103 and allow this claim and dependent claims 44-49 to issue.

Request for Rejoinder of Withdrawn Claims

Applicants respectfully note that withdrawn claims 4, 5, 8-11, 13-17, and 24-26 depend directly from claim 1, which, as discussed above, is believed to be allowable. Accordingly, Applicants hereby request rejoinder of claims 4, 5, 8-11, 13-17, and 24-26. *See* M.P.E.P. § 821.04 (“In order to be eligible for rejoinder, a claim to a nonelected invention must depend from or otherwise require all the limitations of an allowable claim.”). In addition, because claims 4, 5, 8-11, 13-17, and 24-26 depend from an allowable claim, Applicants respectfully submit that claims 4, 5, 8-11, 13-17, and 24-26

are in condition for allowance. Therefore, Applicants request that the Examiner provide an indication of allowance for claims 4, 5, 8-11, 13-17, and 24-26.

New Claims

For further clarification of the present invention, Applicants have added new claims 50-52, depending from independent claims 1, 36, and 38, respectively. Support for these claims may be found in the specification, which recites that “when $R_1 = R_3 = \text{CH}_3$, R_2 , R_4 and R_5 are not all three H.” Specification, p. 2, l. 20. These claims are believed to be allowable over the references cited above for at least the same reasons as their respective independent claims. Furthermore, none of Alves, Hawthorne, or Merkle provide any indication that R_2 , R_4 and R_5 may be selected on the basis of the other substituents of the pyrazole. Thus, claims 50-52 are believed to be allowable over the cited references for at least this additional reason.

Conclusion

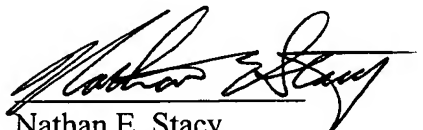
Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Authorization for Extensions of Time and Payment of Fees

Applicants believe that no fees are due at this time. However, in accordance with 37 C.F.R. § 1.136, Applicants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request thereof. If any fees are due, the Commissioner is authorized to charge Deposit Account No. 06-1315; Order No. COVM:0003/SWA/STA (1660WO/US).

Respectfully submitted,

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